
Based on a preliminary risk assessment Matilda has developed the following draft EMPs for inclusion in the Draft EIS:

- Flora
- Fauna
- Sea Turtles management
- Ground water quality protection
- Surface water quality protection
- Hydrocarbon and hazardous substances management
- Waste management and disposal
- Dust and noise
- Fire management
- Pest, weeds and diseases
- Radiation management plan
- Biting insects

These are presented below.

25.1 Flora Environmental Management Plan

Objective and Targets	To minimise the area of land disturbed and to minimise the area of land that is cleared at any point by proposed operations. To avoid disturbing areas that have been found to contain species protected under the EPBC Act 1999 and TPWC Act 2000, where possible. To avoid disturbing vegetation communities considered as having conservation significance, and environmentally sensitive areas. To prevent disturbance of flora outside of designated construction and operational areas. To progressively rehabilitate mining areas within one season of disturbance as per the requirements of the Mine Closure and Rehabilitation Plan.
Actions	• Minimise areas of disturbance. • Establish program for identifying listed annual species that could possibly occur within the proposed mining areas. • Identify areas that are not to be disturbed for conservation reasons and ensure that staff and contractors are aware of restrictions. • Stockpile and re-spread soil and vegetation prior to mining. • Reinstate soil and vegetation within one season to maximise chances of re-colonisation from seed bank. • Identify and target key flora species for revegetation and seeding programs. • Maintain a buffer zone of at least 50 m adjacent to swamps, wetlands, mangroves, creeks and rivers to prevent any potentially negative impacts of mining upon these habitats. • Maintain a minimum buffer distance of 200 m from the beach areas to the mining areas to protect sea turtle nesting beaches.
Monitoring	• Pre and post mining vegetation monitoring program. • Weed monitoring will be included in vegetation monitoring program (discussed in Pest, Weed and Disease Environmental Management Plan).
Reporting	The results of Matilda's flora management and monitoring program will be documented in Matilda's Annual Report of performance against the MMP.
Corrective Actions	The following constitutes an incident or failure to comply: • Unauthorised disturbance of vegetation outside of the designated area. • Unauthorised disturbance of protected species. • Evidence of weed infestation. All incidents will be reported and managed through to resolution via Matilda's incident reporting procedures.
Relevant Legislation and Standards	• Matilda's Environmental Policy • <i>Weeds Management Act 2001</i> • <i>Plant Diseases Control Act 1979</i> • <i>Biological Control Act 1986</i> • <i>Territory Parks and Wildlife Conservation Act 1999</i> • <i>Environment Protection and Biodiversity Act 2000</i>

25.2 Fauna Environmental Management Plan

Objectives and Targets	To minimise impact of proposed operations on local fauna, and to progressively rehabilitate mined areas as soon as practicably possible. To avoid disturbing area that have been found to contain species protected under the EPBC Act 1999 and TPWC Act 2000, CAMBA, JAMBA and the Bonn Convention, where possible. To prevent the introduction and spread of feral animals, in particular cane toads and feral ants. To progressively rehabilitate mining areas within one season of disturbance as per the requirements of the Mine Closure and Rehabilitation Plan.
Actions	- Minimise areas of disturbance. - Identify areas that are not to be disturbed for conservation reasons and ensure that staff and contractors are aware of restrictions. - Survey areas identified as being inhabited by Butler's dunnart along Lethbridge haul road and investigate options for realigning the road to avoid disturbance. - Survey areas within mine sites that are found to be inhabited by masked owl and develop procedures to prevent and monitor impacts on this species. - Return old logs salvaged from cleared areas to rehabilitated areas to facilitate recolonisation of areas by local fauna (including birds). - Relocating fauna of conservation significance if found in the mine or camp areas. - Identify and target key fauna species for recolonisation of rehabilitated areas where appropriate. - Maintain a buffer zone of at least 50 m adjacent to swamps, wetlands, mangroves, creeks and rivers to prevent any potentially negative impacts of mining upon these habitats. - Maintain a minimum buffer distance of 200 m from the beach areas to the mining areas to protect sea turtle nesting beaches.
Monitoring	Fauna monitoring program. Masked owl monitoring program. Further survey of Butler's dunnart found to occur along the Lethbridge haul road. Feral monitoring will be included in fauna monitoring program (discussed in Pest, Weed and Disease Environmental Management Plan).
Reporting	The results of Matilda's fauna management and monitoring program will be documented in Matilda's Annual Report of performance against the MMP.
Corrective Actions	The following constitutes an incident or failure to comply: - Decline in fauna abundance and species diversity. - Disturbance to species protected under the EPBC Act 1999 and TPWC Act 2000, CAMBA, JAMBA and the Bonn Convention - Disturbance of habitats of known protected species. - Introduction or spread of feral species. - All incidents will be reported and managed through to resolution via Matilda's incident reporting procedures.
Relevant Legislation and Standards	- Matilda's Environmental Policy <i>Biological Control Act 1986</i> <i>Mine Management Act 2001</i> <i>Territory Parks and Wildlife Conservation Act 1999</i> <i>Environment Protection and Biodiversity Act 2000</i>

25.3 Sea Turtles Environmental Management Plan

Objectives and Targets	To prevent impact from construction and mining activities on sea turtles behaviour on beaches adjacent to the mining areas.
Actions	• Access to turtle nesting beaches will be restricted to sea turtle monitoring activities only. • A 200 m buffer zone will be used to provide a physical barrier between the proposed mining operations and the sea turtle nesting beach. • Mining operations will be undertaken during the day shift only. (The only equipment that will operate during the night will be the feeder and a corresponding loader in the mining area. The processing plant will operate 24 hours a day but this is to be located on the escarpment.) • Orange and red lights or yellow low pressure sodium vapour lamps will be used wherever possible for external lighting, except where safety considerations require other coloured lights, to minimise potential light impacts. • Where white and other coloured lights, including fluorescent lights, are used, the light spill will be reduced by either shades or orientation. There will be minimal light visible from the beach where the sea turtles nest. No lights will face seawards except for those required for safe operation of the mine site. Shades will be constructed over lights to prevent sky glow. • Lights will be low to the ground wherever possible. Pathway lights will be less than one metre in height and shaded to prevent upward illumination. Preference will be given to manually operated switches that enable selected parts of the mine site and the camp site to be illuminated separately. • Reflective tape may be used to reduce the amount of ambient light where the safety of personnel is not compromised.
Monitoring	• Sea turtle monitoring program.
Reporting	The results of Matilda's sea turtle management and monitoring program will be documented in Matilda's Annual Report of performance against the MMP. Reports will also be supplied to the Tiwi Land Council, Office of Environment and Heritage, Biodiversity Conservation Division, and Department of Environment and Heritage.
Corrective Actions	If mining activities are deemed to have an adverse effect on sea turtle numbers, then immediate steps will be taken to mitigate impacts and implement required corrective actions. All incidents will be reported and managed through to resolution via Matilda's incident reporting procedures. Incidents relating to sea turtles will also be documented as part of Matilda's turtle monitoring program.
Relevant Legislation and Standards	• <i>Environment Protection and Biodiversity Act 2000</i> • <i>Territory Parks and Wildlife Conservation Act 1999</i> • National Strategy for the Conservation of Australian Species and Communities Threatened with Extinction • National Strategy for the Conservation of Australia's Biological Diversity 1996 • IUCN Red List of Threatened Species 2000

25.4 Groundwater Quality Environmental Management Plan

Objectives and Targets	To ensure that potential negative impacts on groundwater quality are prevented or minimised. To prevent impact due to borefield operation.
Actions	• Undertake further modelling at Lethbridge to assess the impact in more detail prior to mining. • Process water recovery rates should be maximised to reduce borefield supply rates and maximise the efficiency of the system • Construct groundwater monitoring facilities near the HMC stockpile at the Andranangoo and Lethbridge sites. • Prevent excavation into acid sulphate soils. This will prevent acidification and resulting metals mobilisation of groundwater by PASS and ASS. • Store fuel in double skinned isotainers and chemicals in sealed and bunded facilities. This bunding will contain any potential fuel spills in the facility. • Fuel spills will be treated using a spill response kit that will be stored at the site.
Monitoring	Fluctuations in groundwater levels. Borefield abstraction. rates and quality Process water recovery rates and quality. Groundwater salinity variations between the coast and borefields. Biological may be required to assess any impacts of the borefield, especially in areas where a lowered water table could occur.
Reporting	The results of Matilda's ground water quality management and monitoring program will be documented in Matilda's Annual Report of performance against the MMP. Where an incident causes or threatens to cause pollution resulting in material or serious environmental harm the EPA must be informed within 24 hours of becoming aware of the incident as per the requirements of the <i>Waste Management and Pollution Control Act 1998</i>
Corrective Actions	The following will be classified as an incident or failure to comply in relation to ground water management: • Seawater Intrusion at Andranangoo • Groundwater contamination • Impacts on vegetation All incidents will be reported and managed through to resolution via Matilda's incident reporting procedures.
Relevant Legislation and Standards	Matilda's Environmental Policy <i>Mine Management Act 2001</i> ANZECC Guidelines for Fresh and Marine Water Quality 2000 NHWQRC 2004 Australian Drinking Water Guidelines <i>Waste Management and Pollution Control Act 1998</i> <i>Water Act 1992</i> <i>Water Supply and Sewerage Act 1988</i>

25.5 Surface Water Quality Environmental Management Plan

Objectives and Targets	To ensure that potential negative impacts on surface water quality are prevented or minimised. To minimise erosion and disturbance to drainage. To prevent erosion or deposition of sediment into surface water bodies beyond natural fluctuations. To prevent disruption to fish movements in adjacent creeks.
Actions	Landform • All earthworks should be managed so as to minimise disturbance to drainage channels and erosion. • Maintain buffer zones from mining activities to the Spring High Water Mark of 200 m on turtle nesting beaches, to prevent inundation of mining areas during tidal surges to the sites. • Minimise the area of disturbance in order to minimise the volume of surface water generated in the mining slot and the volume of sediment that can be eroded. • Construct internal drainage within the mining slot to collect run-off, prevent soil erosion and sediment transport outside the mining slot by tailings. • Backfill the mining slot and compact the area with earthmoving machinery as soon as practicable after mining ceases. • Backfill mined areas to provide a stable landform that is consistent with the pre-mining landform and compatible with surface water drainage requirements prior to revegetation. • Revegetate the backfilled landform as soon as practicable with an appropriate range of species. Sedimentation and Drainage Control • Maintain buffer zones from mining activities adjoining adjacent creek systems, wetlands/damplands and the mangroves of 50 m to prevent deposition of sediments into these systems. • Establish a buffer zone with silt fencing and a small bund around the existing spring near the Andranangoo deposit to prevent soil deposition into the existing spring and stream and prevent potential flooding of the mining area from the spring or break-out from the mining slot into the stream. • Construct a temporary bund and shallow spoon drain on the escarpment side of the road in the mining area to provide flood protection to the active mining area and divert flows around the active mining and rehabilitation areas. • Spread surface water flows from spoon drains and diversions into the rehabilitation areas using wide and shallow drains with minimal slopes. • Install adequately sized spoon drains parallel to the haul roads and adequately sized floodway(s), pipes or culverts beneath the haul road at existing streams and otherwise at regular intervals to collect surface water from existing streams and from the haul road spoon drains. • Construct haul roads at the appropriate elevation and compaction and with the appropriate materials for the proposed traffic volume of trucks/day and weight to minimise the potential for washout of the haul roads during large storm events. • Construct small spoon drains to divert surface water flows around feeder stockpiles and maintain silt fences around the perimeter of the feeder stockpile to minimise the transport of sediment. Contamination • Construct a facility with bunding and roofing for the HMC stockpile at the Andranangoo and

	Lethbridge sites. • Use the existing bunded and roofed facility at Port Melville to stockpile mineral sands from both Andranangoo and Lethbridge sites prior to shipping. • Prevent excavation into acid sulphate soils (ASS). This will prevent acidification and resulting metals mobilisation of surface water. • Store fuel in double skinned isotainers and chemicals in sealed and bunded facilities. Monitor water quality visually prior to discharge from these facilities. • Fuel spills will be treated using a spill response kit that will be stored at the site. • Transport chemical and oily wastes to Port Melville to be shipped to Darwin for disposal in an appropriate waste management facility.
Monitoring	• Soil erosion monitoring. • Surface water monitoring program. • Rainfall monitoring. • Flow measurement downstream of the spring at Andranangoo. • Visual inspections of chemical, hydrocarbon and concentrate storage facilities.
Reporting	The results of Matilda's surface water quality management and monitoring program will be documented in Matilda's Annual Report of performance against the MMP. Where an incident causes or threatens to cause pollution resulting in material or serious environmental harm the EPA must be informed within 24 hours of becoming aware of the incident as per the requirements of the <i>Waste Management and Pollution Control Act 1998</i>.
Corrective Actions	The following will be classified as an incident or failure to comply in relation to surface water management: • Increased top soil erosion • Sedimentation throughout local water courses • Surface water contamination • All incidents will be reported and managed through to resolution via Matilda's incident reporting procedures.
Relevant Legislation and Standards	• Matilda's Environmental Policy • <i>Mine Management Act 2001</i> • <i>Soil Conservation and Land Utilisation Act 1985</i> • <i>ANZECC Guidelines for Fresh and Marine Water Quality 2000</i> • <i>Waste Management and Pollution Control Act 1998</i> • <i>Water Act 1992</i> • <i>Water Supply and Sewerage Act 1988</i>

25.6 Hydrocarbons and Hazardous Substances Environmental Management Plan

Objectives and Targets	To safely use, store and dispose of chemicals and hazardous goods and prevent the uncontrolled release of chemicals to the environment. To comply with relevant Australian standards (for the storage and handling of flammable and combustible liquids and dangerous goods) including: - AS 4452 The Storage and Handling of Toxic Substances; - AS 1940 The Storage and Handling of Flammable and Combustible Liquids; and - AS 3740 The Storage and Handling of Corrosive Substances.
Actions	- All hazardous and dangerous goods will be handled and stored according to the information provided on the MSDSs, the Australian Standards for the storage and handling of flammable and combustible liquids (AS 1940 – 1993) and the Australian Standards for the storage and handling of corrosive substances (AS 3780 – 1994). - Appropriate bunded storage and refuelling areas for fuels and dangerous goods will be provided. These facilities will be inspected on a regular basis and maintained to ensure compliance with Australian Standards. - Waste oil would be collected in 205 L drums identified as waste oil. Other oily wastes including generator set oil, oil filters and rags would also be placed in 205 L drums identified as oily wastes. On site these wastes would be stored on the fuel storage bund. AFD will then take waste oil off site for storage at the oily waste storage facility at Port Melville before shipping to the mainland for appropriate disposal. - Matilda personnel will have access to safety equipment required for the correct handling of hazardous goods and Matilda has developed spillage clean-up procedures as well as spill stations in the event of a spill. - Controls will be implemented to ensure all transfer of fuels and chemicals is managed to prevent spillage inside bunded areas. - Any spills will be cleaned up immediately. - Contaminated runoff and contaminated soil will be collected and remediate or transported to a suitable facility for disposal on the mainland.
Monitoring	- Inspections of storage tanks and bulk containers and the integrity of bunded areas, pavement and associated containment systems will be conducted on a monthly basis. - Surface water monitoring program. - Groundwater monitoring program.
Reporting	The Environment Coordinator will record and sign off on monthly inspections of containers, bund integrity, valves and storage and handling areas. The results of Matilda's hydrocarbon and hazardous goods management program will be documented in Matilda's Annual Report of performance against the MMP. Where an incident causes or threatens to cause pollution resulting in material or serious environmental harm the EPA must be informed within 24 hours of becoming aware of the incident as per the requirements of the Waste Management and Pollution Control Act 1998.
Corrective Actions	The following constitutes an incident or failure to comply in relation to fuels and dangerous goods management: - A fuel or chemical spill. - Storage areas not meeting Australian Standards. - Storage areas not containing suitable bunding. - Release of fuels or chemicals to the environment.

	Should an incident occur, a selection of the following corrective actions will be undertaken as appropriate: • Contain and clean up spilt material immediately and remediate or appropriately dispose of contaminated material. • Repair containments systems. • Relocate fuel to appropriately bunded or approved storage areas. • Implement procedures or measures to avoid recurrence. • All incidents will be reported and managed through to resolution via Matilda's incident reporting procedures. • Where an incident causes or threatens to cause pollution resulting in material or serious environmental harm the EPA must be informed within 24 hours of becoming aware of the incident as per the requirements of the <i>Waste Management and Pollution Control Act 1998</i>.
Relevant Legislation and Standards	• Matilda's Hydrocarbon and Chemical Management Procedures • <i>Dangerous Goods Act 1981</i> • <i>Waste Management and Pollution Control Act 1998</i> • Australian Standards for the storage and handling of flammable and combustible liquids (AS 1940 – 1993) • Australian Standards for the storage and handling of corrosive substances (AS 3780 – 1994)

25.7 Waste Environmental Management Plan

Objectives and Targets	To minimise and mitigate potential environmental impacts associated with the generation and disposal of waste from proposed operations. To promote the efficient use of resources and minimisation of waste generation and disposal.
Actions	- Domestic type waste arising from the camp (including kitchen and office waste) will be collected in 205 L drums, and periodically burnt and disposed of in a small sanitary landfill trench adjacent to the infrastructure area. The trench will be dug with a backhoe, and covered with earth following burning to discourage birds and animal access. Upon completion of mining the disposal trench area will be covered and surface turned to encourage revegetation. - Miscellaneous vehicle waste (tyres, batteries, scrap parts) will be collected for return to Darwin for appropriate recycling and / or disposal. - Waste oil will be collected in 205 L drums identified as waste oil, and other oily wastes including generator set oil, oil filters and rags will also be placed in 205 L drums identified as oily wastes. On site these wastes will be stored on the fuel storage bund. AFD will then take waste oil off site for storage at the oily waste storage facility at Port Melville before shipping to the mainland for appropriate disposal. - Any chemical waste (very minor quantities) will be collected in a 205 L drum identified as chemical waste. It is proposed that these wastes will be taken to Port Melville for collection by a waste recycling and disposal contractor (Drum Muster). - The septic tank system with associated soakage trench for the camp kitchen and ablution areas will be covered and appropriate chemicals applied to reduce the chance of spread of disease and the likelihood of a mosquito breeding ground. - Tailings from the process will comprise clean sand rejected from the minerals separation process. All clean sand tailings will be returned to the previously mined areas for rehabilitation.
Monitoring	- Inspections of waste facilities will be conducted on a weekly basis. - Inspections of septic systems will be undertaken as per manufacturer requirements.
Reporting	The Environment Coordinator will record and sign off on monthly inspections of waste management and septic systems. - The results of Matilda's waste management program will be documented in Matilda's Annual Report of performance against the MMP. - Where an incident causes or threatens to cause pollution resulting in material or serious environmental harm the EPA must be informed within 24 hours of becoming aware of the incident as per the requirements of the <i>Waste Management and Pollution Control Act 1998</i>.
Corrective Actions	The following constitute incidences or failures to comply in relation to waste management policies: - Unnecessary volumes of waste being sent for disposal. - Wastes being disposed of rather than reused or recycled where possible. - Uncontrolled waste disposal. - Non compliance with waste tracking procedures. - Other non-compliances with the waste management plan. - Surface water or groundwater contamination. Should an incident or failure to comply occur, Matilda will: - Take the necessary actions to identify the causes of non-conformance with the waste management plan performance requirements. - Implement all actions necessary to ensure compliance.

	• All incidents will be reported and managed through to resolution via Matilda's incident reporting procedures.
Relevant Legislation and Standards	• Matilda's Environmental Policy • <i>Mine Management Act 2001</i> • <i>Litter Act 1972</i> • <i>Waste Management and Pollution Control Act 1998</i> • <i>Mine Management Act 2001</i>

25.8 Dust and Noise Environmental Management Plan

Objectives and Targets	To minimise dust from construction and mining activities. To minimise potential noise issues related to the operations and to mitigate any potential noise impacts. To minimise dust emission complaints.
Actions	- The mine and haulage road is well away from populated areas. The road will be maintained to ensure its suitability for use and will be regularly watered from water bores along the haul road. - Areas disturbed by mining will be rehabilitated progressively which will reduce dust generation from exposed areas. - If dust does become an issue to the local community Matilda will put in place a monitoring program and initiate further actions to suppress the amount of suspended particles emitted to the atmosphere. - To reduce the amount of noise emitted from the mining operations, the excavation of the sands will only take place in daylight hours. Staff and contractors will also be prohibited from using the beaches adjacent to the mining areas. - All vehicles and machinery under the control of Matilda will be fitted with efficient silencers to reduce the amount of noise emitted. - All cabins will be closed and air conditioned to reduce the effects of noise on employees. - Employees will be allocated earmuff/plugs to further reduce the effects. - Power supply generators will be silenced and located away from camp areas. - Mining operations and rehabilitation will be progressively staged so as to mitigate against dust and noise emissions.
Monitoring	A dust and noise monitoring program will be implemented if emissions get to an unacceptable level.
Reporting	The results of Matilda's air quality and noise management and monitoring program will be documented in Matilda's Annual Report of performance against the MMP. Any complaints will be documented in the complaints register, investigated and reported to Matilda's Project Manager. Where an incident causes or threatens to cause pollution resulting in material or serious environmental harm the EPA must be informed within 24 hours of becoming aware of the incident as per the requirements of the <i>Waste Management and Pollution Control Act 1998</i>.
Corrective Actions	The following would constitutes an incident or failure to comply in regards to air quality and dust management: - Proposed dust mitigation strategies not being implemented. - Emission concentrations exceed guideline levels. - Receipt of a noise or an air quality complaint. - Complaints received about excessive noise at the accommodation village or at sites off-lease. Should an incident or failure to comply occur, Matilda will: - Identify the source of the noise. - If appropriate, implement a noise monitoring program. - Take the necessary actions to identify the causes of the non-conformance. - Implement all actions necessary to ensure compliance. - All incidents will be reported and managed through to resolution via Matilda's incident

	reporting procedures.
Relevant Legislation and Standards	• Matilda's Environmental Policy • Matilda's Safety and Health Policy • <i>Work Health Act 1986</i> • <i>Soil Conservation and Land Utilisation Act 1980</i> • <i>Waste Management and Pollution Control Act 1998</i> • <i>Work Health Act 1986</i> • Motor Vehicles (Standards) Regulations - Australian Vehicle Standards Rules • AS 1055.1 1997 – Acoustics – Description and measurement of environmental noise – General procedures measurement of environmental noise – General procedures

25.9 Fire Environmental Management Plan

Objectives and Targets	To minimise or avoid the impacts of fire. To develop a fire management strategy in consultation with the TLC. To implement a 'No unauthorised fire' policy within the camp and sand mining area.
Actions	• Fire breaks will be maintained around the perimeter of the camp and processing areas on a half yearly basis. • Size of buffering and any reduction burning will be agreed with the chief officer prior to the onset of operations. • Matilda will avoid weeded areas around the historically disturbed areas to prevent the introduction of weeds to the mining area. • A 'no unauthorised fire' policy will be adopted in the camp and processing area to reduce the risk of accidental fire to the camp, processing area and surrounding areas. In the case of fire in the camp or processing area the OH&S procedures will be followed.
Monitoring	• Regular monitoring of fire breaks and fire fighting equipment.
Reporting	• The results of Matilda's fire management and monitoring program will be documented in Matilda's Annual Report of performance against the MMP.
Corrective Actions	The following constitutes an incident or failure to comply: • Fire management program not prepared or implemented. In the event of a failure to comply, investigations will be undertaken into the cause of the incident or failure to comply and the appropriate action taken to overcome the problem. All incidents will be reported and managed through to resolution via Matilda's incident reporting procedures.
Relevant Legislation and Standards	• <i>Fire and Emergency Act 2004</i> • <i>Bushfires Act 1980</i> • <i>Territory Parks and Wildlife Conservation Act 1999</i>

25.10 Pests, Weeds and Diseases Environmental Management Plan

Objectives and Targets	To minimise the impacts on local flora and fauna. To prevent introduction of feral animals (including ants), and other exotic fauna and flora species. To progressively rehabilitate mining areas within one season of disturbance as per the requirements of the Mine Closure and Rehabilitation Plan.
Actions	• Work with the appropriate authorities on the Island and the barging service to ensure weedy seed or plant material is not accidentally transported onto the Island. • Develop internal procedure to ensure that these quarantine requirements are met. • Implement feral animal eradication programs at proposed sand mining sites where appropriate. • Implement weed eradication program at proposed sand mining sites where appropriate. This will include developing guidelines for quick identification of weed species. • Weed management programs in areas where weeds are known to occur will focus on the containment of weed species to areas of known infestations where they can be managed by Island authorities through quarantine procedures.
Monitoring	• Vegetation monitoring program including weed monitoring program. • Fauna monitoring program including feral animal monitoring program.
Reporting	The results of Matilda's pest, disease and weed management and monitoring program will be documented in Matilda's Annual Report of performance against the MMP.
Corrective Actions	The following constitutes an incident or failure to comply: • Evidence of weed infestation or feral pest presence. All incidents will be reported and managed through to resolution via Matilda's incident reporting procedures.
Relevant Legislation and Standards	• Matilda's Environmental Policy • <i>Territory Parks and Wildlife Conservation Act 2005</i> • <i>Biological Control Act 1986</i> • <i>Environmental Protection and Biodiversity Act 2000</i> • <i>Weeds Management Act 2001</i>

25.11 Radiation Management Plan

Objectives and Targets	To prevent any damage to the environment or to personnel through appropriate monitoring and management strategies. To adhere to legislative and licensing requirements for the handling, storage, transport and sale of radioactive substances.
Actions	• Appoint a Radiation Safety Officer. • Conduct all operations in accordance with relevant legislative requirements, licensing conditions, Guidelines and Codes of Practice. • Matilda will commission Western Radiation Services to prepare a more detailed Radiation Management Plan that meets Matilda's license and regulatory requirements, prior to commencement of operations. • Matilda staff will monitor soil radon flux and gamma levels at Andranangoo for the first year of operation in order to ensure that doses are kept below harmful limits and to advise rehabilitation monitoring programs. • After the first year of operation at Andranangoo Matilda will evaluate the need to continue the program based on the data gathered. • Matilda staff will monitor soil radon flux and gamma levels at Lethbridge for the entire production period, estimated to be six months.
Monitoring	• Radon and gamma monitoring program. • Other monitoring requirements as specified by the more detailed Radiation Management Plan.
Reporting	The results of Matilda's radiation management and monitoring program will be documented in Matilda's Annual Report of performance against the MMP. Where an incident causes or threatens to cause pollution resulting in material or serious environmental harm the EPA must be informed within 24 hours of becoming aware of the incident as per the requirements of the <i>Waste Management and Pollution Control Act 1998</i>.
Corrective Actions	The following constitutes an incident or failure to comply: • Evidence of impacts on personnel and/or environment. • Increases in radon and gamma measurements recorded in radiation monitoring program. All incidents will be reported and managed through to resolution via Matilda's incident reporting procedures.
Relevant Legislation and Standards	• Matilda's Environmental Policy • Matilda's Safety and Health Policy • <i>Radiation (Safety Control) Act 1999</i> • <i>Radioactive Ores and Concentrates (Packaging and Transport) Act 2000</i> • <i>Public Health Act 1952</i> • <i>Work Health Act 1986</i> • <i>Waste Management and Pollution Control Act 1998</i> • Code of Practice on Radiation Protection in the Mining and Milling of Radioactive Ores 1987 • Code of Practice for the Radiation Protection and Radioactive Waste Management in Mining and Mineral Processing (2005)

25.12 Biting Insects Environmental Management Plan

Objectives and Targets	To prevent increases in the number of new mosquito breeding sites as a result of proposed sand mining operations. Prevent the transmission of mosquito-borne diseases as result of proposed sand mining operations.
Actions	- Any depressions created in the ground surface will be filled or drained to prevent the ponding of water. - Storage containers capable of ponding water will be either discarded after use or stored in an inverted position (care will be taken to ensure that ponding does not occur in rubbish storage areas). - Inspect ponds and on-site excavations filled with water for the presence of mosquito larvae. If larvae are detected, the Medical Entomology Branch of NT Health will be consulted on what actions should be taken. - Rehabilitate mining areas in a manner that prevents the creation of new mosquito breeding sites. - Drainage channels/spoon drains will be kept as shallow as possible to prevent ponding. - Staff and contractors will be made aware of the potential risk of mosquito borne disease and the high risk periods (late dry to post wet). - Staff and contractors will be advised to wear long sleeved shirts and trousers, avoid going outside at sundown, and to use insect repellent. Insect repellent will be provided at work sites. - Workers will be educated about the early symptoms associated with exposure to mosquito-borne arbovirus and will be instructed on the need to report any symptoms to a medical officer. - On-site accommodation facilities will be screened and air conditioned. Lights will be fitted with yellow bulbs to discourage mosquitoes.
Monitoring	Biting insect monitoring program.
Reporting	The results of Matilda's biting insects management and monitoring program will be documented in Matilda's Annual Report of performance against the MMP. Any significant mosquito activity will be reported to Matilda's General Manager and/or the Medical Entomology Branch.
Corrective Actions	- The following represent an incident or failure to comply: - Mosquito breeding sites are created by construction activities. - Excessive numbers of larvae and/or mature mosquitoes are evident on-site. - Significant incidences of mosquito bites are reported. - Confirmed infection by Ross River or other mosquito-borne disease. - Should an incident or failure to comply occur, a selection of the following actions will be taken: - Employees will be re-educated on desired practices. - Work policies and procedures will be changed to improve the situation. - All incidents will be reported and managed through to resolution via Matilda's incident reporting procedures.
Relevant Legislation and Standards	- Matilda's Environmental Procedures <i>Public Health Act 1952</i>